

SEQUENCE ALIGNMENT

RESULT 2
AAZ57360
ID AAZ57360 standard; cDNA; 1509 BP.
XX
AC AAZ57360;
XX
DT 05-APR-2000 (first entry)
XX
DE Human acyl CoA:cholesterol acyltransferase 2 encoding cDNA.
XX
KW Human; acyl CoA:cholesterol acyltransferase; ACAT-2; diagnosis;

KM antilipemic; hypercholesterolaemia; hypertriglyceridaemia;
 XX hyperlipidaemia; ss.
 OS Homo sapiens.
 XX Key Location/Qualifiers
 XX CDS 1..1509
 FT /tag= "ACAT-2"
 FT /product= "ACAT-2"
 FT /transcript= (pos:571..573,aa:aa)
 FT /note= "Xaa is unspecified"
 XX
 XX W09967368-A1.
 XX
 XX 28-DEC-1999.
 XX
 XX 16-JUN-1999; 99MO-US13683.
 XX
 XX 23-JUN-1998; 98US-0090354.
 XX
 XX 08-JUN-1999; 99US-0328857.
 XX
 XX (RECC) UNIV CALIFORNIA.
 XX
 XX Cases S, Parese RV, Novak S, Erickson SK;
 XX WPI: 2000-106291/09.
 XX P-PSDB: AAY67953.
 XX
 XX Novel polypeptide, useful to treat conditions associated with elevated
 PT cholesterol ester levels e.g. hypercholesterolemia
 XX
 XX Example: Page 52; 57pp; English.
 XX
 XX The present sequence encodes the human acyl CoA:cholesterol
 CC acyltransferase designated ACAT-2. ACAT-2 polypeptides can be
 CC administered therapeutically, especially by expressing encoding
 CC polynucleotides, to treat individuals in need of ACAT-2 polypeptide.
 CC They may especially be administered to treat disease conditions
 CC associated with elevated cholesterol ester levels e.g.
 CC hypercholesterolemia or hyperlipidaemia (including
 CC hypertriglyceridaemia), since ACAT-2 catalyses the esterification of
 CC cholesterol with fatty acyl CoA substrates. The polypeptides can also
 CC be used to diagnose diseases related to polypeptide expression or
 CC activity, by analysing for polypeptide presence or amount in a sample.
 CC They are useful to screen for compounds inhibiting or activating the
 CC polypeptide, which can be included in pharmaceutical compositions and
 CC administered therapeutically to treat conditions associated with ACAT-2;
 CC inhibitory agents can especially be used to inhibit ACAT-2 activity,
 CC especially therapeutically, and especially agents which selectively
 CC inhibit ACAT-2 and not prior art ACAT-1.
 CC
 XX
 XX Sequence 1509 BP; 260 A; 457 C; 439 G; 351 T; 2 other:
 S0
 Query Match 90.9%; Score 1425.8; DB 21; Length 1509;
 Best Local Similarity 95.6%; Pred. No. 0;
 Matches 1509; Conservative 0; Mismatches 9; Indels 60; Gaps 1;

QY 241 CCTGTCCCCCACCCTCCCCAGGTTCTTGAGCAGAGACCAGAGCATCCCTGGGAAA 300
 DB 241 CCTGTCCCCCACCCTCCCCAGGTTCTTGAGCAGAGACCAGAGCATCCCTGGGAAA 275
 QY 301 CAGAAAGTTTCAATCATCCGAAAGTCCCTGCTTATGATGATGAGTGCACATTTTC 360
 DB 276 -----TAGCTGATGAGAGTGCACATTTTC 300
 QY 361 CGACACATCTACACATATTTATGCTGCTGCTGCTGCTTCTTCAATCATGACAGCCTTGGC 420
 DB 301 CGACACATCTACACATATTTATGCTGCTGCTGCTGCTTCTTCAATCATGACAGCCTTGGC 360
 QY 421 ATTCAGCTTATGATGAGGAGGAGGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 480
 DB 361 ATTCAGCTTATGATGAGGAGGAGGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 420
 QY 481 GGACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 540
 DB 421 GGACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 480
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 DB 481 CGGTACAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 540
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 DB 541 TGTGCTGCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 600
 QY 661 GAGCATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 720
 DB 601 GAGCATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 660
 QY 721 ATGAAAGCTTACTCTCTTCTGAGAGAGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 780
 DB 661 ATGAAAGCTTACTCTCTTCTGAGAGAGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 720
 QY 781 GAGGAGATCCAGGCCCCAGTTTCTCAGACTACCTTCACTTCTTCTTCTTCTTCTTCTTCTTCT 840
 DB 721 GAGGAGATCCAGGCCCCAGTTTCTCAGACTACCTTCACTTCTTCTTCTTCTTCTTCTTCTTCT 780
 QY 841 ATCTAGAGGAGACTTACCTCTGAGAGGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 900
 DB 781 ATCTAGAGGAGACTTACCTCTGAGAGGCTGCTGCTGCTGCTGCTTCAATCATGATGATGCTTC 840
 QY 901 TTGCCCCAGGCCCCGAGTGTGCTTCAATCATGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 960
 DB 841 TTGCCCCAGGCCCCGAGTGTGCTTCAATCATGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 900
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Qy 1381 AACTTCATGATGCATGACCAGCGCACCGGCCCGCATGGAACGTGCTGATGTGGACCATG 1440
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Db 1381 |||||CTGTTTCTAGGCCAGGGAATCCAGGTGAGCCTGTACTGCCAGGAGTGGTACGCACGGCGG 1440
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Qy 1561 CATACTAG 1569
Db 1501 |||||CATACTAG 1509
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